

On the Westerly Trend of Certain Fall Migrants in Eastern Maine.

—In investigating the influence of the topography of the land upon the flights of migratory birds, an interesting point is to ascertain to what extent the more prominent physical features of a region determine the direction of these flights, and especially is this important when great natural barriers deviate in their line of extent from the general north and south trend of the paths of migration. During a limited collecting experience of two years in the vicinity of the St. Croix River, a few facts seemingly bearing on this subject have come under my notice. I frequently came in contact with some of those species that perform their migratory journeys during the day, and one circumstance that struck my attention was, that in their fall migrations they all appeared to be flying directly *west*. At first I thought it to be merely a fortuitous circumstance, but repeated observation convinced me that there must be something more in it. I have noted it most frequently in the Swallows and Swifts, and very often in the Nighthawks, and my friend, Mr. Howard H. McAdam, informs me that he has observed this westerly movement in some Hawks when migrating in flocks.

In the case of the water birds, the surrounding country is so cut up by lakes and rivers, that their evidence, unless very accurately taken, is unreliable. Mr. William Brewster, in his account of his observations on the small, night-migrating birds at Point Lepreaux light-house ('Bird Migration,' *Memoirs of Nuttall Club*, No. 1), states that on leaving the light they always proceeded due *west*.

The question involved is this: Whether the birds inhabiting Maine, New Brunswick, and the country further northward, proceed directly south in their autumn journey until they reach the coast line, and then massing upon the coast, take their course westward until they can again continue directly south; or whether they pass across this territory in a westerly or southwesterly direction *from the first*, holding such a course until they reach the first great migration route tending directly south. My own observations being made only from thirty to fifty miles from the sea, would have little weight, even if more thorough, but I note my experience in order to call the attention of other field workers to a point that would be of some interest to determine, and with the hope that someone else may have had a similar experience.—LOUIS M. TODD, *Calais, Maine*.

A Bird Scare.—At half-past three o'clock on the morning of the 26th August, I was awakened by a noise which I had some difficulty, in my drowsy condition, in making out. I first thought it was from heavy drops of rain on the zinc floor of a balcony outside of my bedroom—such drops as precede a thunderstorm—and I lay back to sleep again. The noise continued, and I then knew it was caused by some objects flying against the windows. There is an electric lamp on a level with the middle of the window and only thirty feet away, and I thought it might be some unusually large moths striking against the glass. The noise was so irritating that sleep was out of the question, and I got up and went to the

window. The upper sash was down about 18 inches, and when I opened the inside Venetians a bird flew in. I saw some others flying against the glass, and throwing up the lower sash of the window I stepped on the balcony and easily caught two birds—all that were there then. At another window at the head of my bed I heard at least one bird, but I could not easily reach it, and it soon went away or dropped to the ground.

I placed the two I had caught under a glass shade, where they continued their fruitless efforts against the glass until I covered it up with a dark colored cloth. The bird in the room kept up an incessant fluttering against the walls and ceiling and eluded me completely. At daylight I noticed the ceiling streaked on the window side with blood—some two or three hundred marks altogether, from two inches long and three-eighths of an inch wide down to almost imperceptible dots. With the aid of a friend I secured the poor little frightened thing and put it also under a glass shade, first compelling it to swallow some water. It was a Tennessee Warbler, and the feathers and skin were completely torn off its head and showed a large and nasty wound already dry and healing. When taking it out in the afternoon to try and feed it, for it would eat nothing I put under the shade for it, it got out of my hand and again flew about the top of the room. At four in the afternoon I let the two under the shade out, and one found its way to the open window and flew a couple of hundred yards, when it got beyond my sight. The other joined the Warbler, but neither would fly low enough to get out at the top of the windows. Neither flew so as to hurt itself. At last the smaller bird got out, but the Warbler did not follow it. I left the windows wide open and when I came back, just before dark, it was gone. They were all this year's birds, the two caught on the window being Flycatchers—one quite young with the down still showing between the feathers, but flying well.

It turned out that during the night a general scare of birds had taken place, and I was asked all sorts of questions on the subject. A number of birds were brought to me to be identified. Some were rare visitors here—the Hermit Thrush, for instance. I was handed a pretty specimen of the Golden-crowned Thrush, but the crown was marred by a ghastly wound on which the blood was still fresh; in trying to escape from the hand its whole tail came out. It flew about the room, this was the 27th, until evening when it at last went out at the window.

On the evening of the 26th I took a walk to my friends, the taxidermists, and I learned from them that they had been offered large numbers of birds during the day by small boys who had caught them on the streets or on hawthorn bushes. One little fellow saw the birds during the day falling off the bushes exhausted. They flew in a circle and were quite dazed. One man said he counted fifty dead birds lying against the wall of a building as he walked past. During the night the 'Free Press premises were invaded by them until the windows had to be shut. Through this paper I asked for information as to where the scare originated, but so far no one has replied.

My own opinion is that the birds were overtaken while roosting by a

forest fire fanned by a southern breeze; that in their stupor, their instincts teaching them at the time of fear to fly south if anywhere, they flew into the smoke and got suffocated and frightened. No doubt thousands lost their lives and fell into the flames below. The survivors then flew away from the fire, and coming over this city were attracted by the electric lights and flew madly against the walls of buildings. At the Queen's Hotel, where the windows also had to be shut, there is a light as well as at the 'Free Press.' Two years ago a similar stampede was reported in one of the Southern States, but of Ducks alone. They flew in hundreds against the electric masts, and then against buildings. Our lights are on poles only 25 to 30 feet high.

The birds were all small and most of them of this year. Among those picked up or caught were the Redstart, the Black-and-white Creeper, the Tennessee Warbler, the House Wren, Flycatchers, the Hermit Thrush, the Golden-crowned Thrush, and the Chestnut-sided Warbler. The last is a rare visitor here. Small Sparrows, I am told, had been found, but I am not sure of this.

Mr. W. Hurd, our taxidermist, saw next day a Thrush flying along Main Street diagonally and only about two feet above the ground. The birds were all weak, but many, like those which struck my windows, evidently recovered, at least their senses. All were stupified, and many had wounds evidently caused by barbed wire.

In skinning the birds for preservation Mr. Hurd failed to notice anything which could have caused death; the various organs appeared sound and healthy, though the birds were rather small for him to be very certain regarding all of them.

I should have mentioned that the forests were on fire some eight miles south of the city.—ALEXANDER McARTHUR, *Winnipeg, Manitoba.*

CORRESPONDENCE.

[Correspondents are requested to write briefly and to the point. No attention will be paid to anonymous communications.]

The Dermo-Tensor Patagii Muscle.

TO THE EDITORS OF THE AUK:—

Dear Sirs:—In this letter the writer proposes to reply to a criticism of Leonhard Stejneger, which appeared in 'Science' August 5, of an account of mine of a muscle which is present in certain birds, and which I designated by the name entitling this communication.

To those who are aware of the conditions under which I prosecute my anatomical work no word need be said; my labors in the myology of